

**REMARKS**

By this Amendment, Applicants amend claims 1, 7, and 13 to more appropriately define the invention. Claims 1, 2, 4-8, 10-14, and 16-18 remain currently pending.

In the Office Action, the Examiner rejected claims 1, 2, 4-8, 10-14, and 16-18 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,185,860 to Wu ("Wu") in view of U.S. Patent No. 6,101,499 to Ford et al. ("Ford").<sup>1</sup>

Applicants respectfully traverse the rejection of claims 1, 2, 4-8, 10-14, and 16-18 under 35 U.S.C. § 103(a) as being unpatentable over Wu in view of Ford.<sup>2</sup> To establish obviousness based on a combination or suggestion of prior art, "Office personnel must articulate . . . a finding that the prior art included each element claimed, although not necessarily in a single prior art reference, with the only difference between the claimed invention and the prior art being the lack of actual combination of the elements in a single prior art reference." M.P.E.P. § 2143.A.

Independent claim 1, as amended,<sup>3</sup> recites a combination including, for example,

a comparing unit configured to, under a condition where a prefix corresponding to the interface identification information of the prescribed node stored in another node, not connected to the network, differs from a prefix corresponding to the interface identification information of the prescribed node, shared with the another node and stored in the node information storing unit, compare the interface identification information converted by using the one way function which is received from the another node, with the interface identification information as converted by the function

---

<sup>1</sup> The Office Action contains a number of statements reflecting characterizations of the related art and the claims. Regardless of whether any such statement is identified herein, Applicants decline to automatically subscribe to any statement or characterization in the Office Action.

<sup>2</sup> The Office Action fails to set forth an explanation for each and every element of the pending claims, e.g., claim 1. See Office Action at 4.

<sup>3</sup> Support for the amendments may be found at, for example, pages 10-12, Figs. 7-8 of the specification.

conversion unit, in order to allow the another node to obtain the prefix corresponding to the interface identification information of the prescribed node, shared with the another node and stored in the node information storing unit.

(emphasis added.) Wu fails to teach or suggest at least these features of amended claim 1.

Wu discloses “a computer network node discovery system that provides a general way of discovering network elements, or nodes, connected to a computer network, and a specific algorithm for discovering nodes connected to a TCP/IP network.” (Wu, Abstract.) However, “Wu fails to teach . . . a comparing unit configured to compare the interface identification information . . . .” (Office Action at 3.)

Ford fails to cure the deficiencies of Wu. Ford describes “a method . . . for automatically generating an IP network address . . . without IP address servers.” (Ford, Abstract.) “An IP address is divided into three portions or regions: a format indication portion, a network identifying portion, and a host identifying portion.” (Ford, column 7, lines 11-13.) “In each of the three IP addressing formats shown in FIGS. 3A-3C, there is a network identifying portion that indicates the network whereon the host resides and a host identifying portion that identifies the particular host on the designated IP network.” (Ford, column 7, lines 43-47.) “First, a proposed IP address is generated by selecting a network identifying portion . . . while deterministically generating the host identifying portion based on information available to the IP host. For example, the IEEE 802 Ethernet address found in the network interface card may be used with a deterministic hashing function to generate the host identifying portion of the IP address. Next, the generated IP address is tested on the network to assure that no existing IP

host is using that particular IP address. If the generated IP address already exists, then a new IP address is generated.” (Ford, Abstract.)

That is, Ford at most teaches a method for converting interface identification information of a node by using a deterministic hash function, setting the converted interface identification information as a proposed prefix of the node, comparing the proposed prefix with prefixes of other nodes, setting the proposed prefix as a prefix of the node if the proposed prefix does not coincide with one of the prefixes of other nodes, and further converting the proposed prefix by using the deterministic hash function if the proposed prefix coincides with one of the prefixes of other nodes.

However, Ford fails to teach or suggest at least

a comparing unit configured to, under a condition where a prefix corresponding to the interface identification information of the prescribed node stored in another node, not connected to the network, differs from a prefix corresponding to the interface identification information of the prescribed node, shared with the another node and stored in the node information storing unit, compare the interface identification information converted by using the one way function which is received from the another node, with the interface identification information as converted by the function conversion unit, in order to allow the another node to obtain the prefix corresponding to the interface identification information of the prescribed node, shared with the another node and stored in the node information storing unit.

as recited in amended claim 1 (emphases added).

In contrast, Ford merely discloses the method for comparing a prefix of a node with prefixes of other nodes and further converting the prefix of the node if the prefix of

the node coincides with one of the prefixes of other nodes, in order to **establish uniqueness of the prefix automatically generated on the network.**

Therefore, Wu and Ford fail to teach or suggest all claim elements of amended claim 1 and amended claim 1 should be allowable over Wu and Ford. Accordingly, Applicants respectfully request withdrawal of the Section 103(a) rejection of amended claim 1. Because claims 2 and 4-6 depend from claim 1, Applicants also request withdrawal of the Section 103(a) rejection of claims 2 and 4-6 for at least the same reasons stated above.

Further, amended independent claims 7 and 13, while of different scope, include similar recitations to those of amended claim 1. Amended claims 7 and 13 are therefore also allowable for reasons at least similar to those stated above with respect to amended claim 1. Applicants respectfully request withdrawal of the Section 103(a) rejection of amended claims 7 and 13, and of claims 8 and 10-12 and claims 14 and 16-18, which depend from claim 7 or 13.<sup>4</sup>

In view of the foregoing amendments and remarks, Applicants respectfully request reconsideration and reexamination of this application and the timely allowance of the pending claims.

---

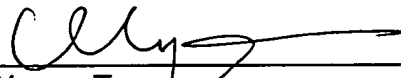
<sup>4</sup> Wu and Ford also fail to teach or suggest subject matter of the dependent claims. For example, Wu and Ford fail to mention "IPv6" as recited in claims 6, 12, and 18.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,  
GARRETT & DUNNER, L.L.P.

Dated: August 3, 2009

By:   
Wenye Tan  
Reg. No. 55,662  
(571) 203-2722